

IN THE CLAIMS:

1. **(Currently Amended)** Wafer support apparatus for an ion implanter having an implantation chamber for receiving an ion beam, comprising

a wafer holder for holding a wafer in the implantation chamber during implantation,

~~an arm for supporting carrying~~ the wafer holder in the implantation chamber and having ~~a~~an arm portion adjacent the wafer holder which is at least intermittently exposed to the ion beam during implantation, and

~~an arm shield mechanism providing on the arm and having a~~  
~~plurality of shielding surfaces which can be selectively disposed to shield~~  
~~receive the ion beam to protect said arm exposed portion of the arm from~~  
~~said at least intermittent exposure to the ion beam.~~

2. **(Original)** An apparatus according to claim 1, wherein the shielding surfaces are disposed on a sleeve arranged over the arm.

3. **(Original)** An apparatus according to claim 2, wherein the sleeve is rotatable about a longitudinal axis of the arm.

4. **(Previously Presented)** An apparatus according to claim 2, wherein the sleeve has three or more facets and a shielding surface is disposed on each facet.

5. **(Previously Presented)** An apparatus according to claim 2, wherein each shielding surface further comprises a ridge extending substantially from an end of the shielding surface closest to the wafer support and along the longitudinal axis of the arm when the shielding surface is disposed to receive the ion beam.

6. **(Original)** An apparatus according to claim 5, wherein the ridge or ridges of a first shielding surface protrude by a sufficient amount to receive the ion beam and to protect at least one juxtaposed shielding surface.

7. **(Previously Presented)** An apparatus according to claim 4, wherein the shielding surface disposed to receive the ion beam is arranged so that the ion beam strikes the said shielding surface with a substantially perpendicular angle of incidence.

8. **(Previously Presented)** An apparatus according to claim 1, wherein each shielding surface is thermally isolated from a juxtaposed shielding surface.

9. **(Previously Presented)** An ion implanter for implanting ions into a wafer, comprising an apparatus according to claim 1.

10. **(Currently Amended)** A method for protecting an arm of a wafer support apparatus for an ion implanter, the implanter having an implantation chamber for receiving an ion beam, the arm supporting carrying a wafer holder in the implantation chamber and having a an arm

portion adjacent the wafer holder which is at least intermittently exposed to the ion beam during wafer implantation,

the method comprising;

disposing a first shielding surface of a shield mechanism on  
the arm to receive the said ion beam to shield protect the said exposed  
arm portion of the arm from said at least intermittent exposure to the ion  
beam for a pre-determined number of processes, and

disposing a second shielding surface to protect the said exposed arm portion of the arm after a pre-determined number of wafer processes or if the ion species in the ion beam is changed.

11. **(Original)** A method according to claim 10 wherein the shielding surfaces are moved automatically between wafer processes to protect the said exposed portion of the arm.

12. **(Currently Amended)** A method according to claim 10, wherein the shielding surfaces are disposed on a sleeve arranged over the arm, and the sleeve is rotated relative to the arm=s-a longitudinal axis of  
the arm to dispose a shielding surface to protect the said exposed portion of the arm.

13. **(Currently Amended)** A shield apparatus for protecting mounting on an arm carrying a wafer holder in an implantation chamber  
of an ion implanter, of a wafer support mechanism said shield apparatus  
being arranged for protecting the arm from ions in an ion beam during a  
wafer ion implantation process, said apparatus comprising

a plurality of shield portions, each being movable between a first and second position with respect to the arm, so that during an ion implantation process, ions in the ion beam are prevented from hitting the arm by a shield portion in the first position, and substantially no ions in the ion beam hit a shield portion in the second position.